

Appl. No. 10/517,322  
Amendment dated: April 28, 2008  
Reply to OA of: March 26, 2008

This listing of claims will replace all prior versions and listings of claims in the application.

**Listing of Claims:**

1(currently amended). A coated metal surface on a solid support, wherein the coating consists of a protein layer firmly attached to the metal surface, and said protein layer is coupled to linker molecules that are bound to low molecular weight antigens, wherein the linker molecules, in addition to reacted end groups, are coupled to the protein layer and are bound to the antigen via functional end groups and contain between the functional end groups have an aliphatic hydrocarbon chain of 1, 2 or 3 carbon atoms, and wherein the antigens are optionally reversibly bound to antibodies specific for the antigens.

2(original). The coated metal surface on a solid support according to claim 1, wherein the metal is selected from the group consisting of gold, silver, aluminum, nickel, chrome chromium and titanium.

3(previously presented). The coated metal surface on a solid support according to claim 1, wherein the antigens are the same or different and are bound to the same protein layer or to different patches of protein layers and are selected from the group consisting of optionally derivatized explosives and narcotics.

4(original). The coated metal surface on a solid support according to claim 3, wherein the explosives are selected from the group consisting of trinitrotoluene (TNT), dinitrotoluene (DNT), hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX), octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazine (HMX), pentaerythritol tetranitrate (PETN), and nitroglycerine (NG).

5(original). The coated metal surface on a solid support according to claim 3, wherein the narcotics are selected from the group consisting of cocaine, heroine, amphetamine, methamphetamine, cannabiols, tetrahydrocannabiols (THC), and methylenedioxy-N-methylamphetamine (extacyEcstasy).

6(previously presented). The coated metal surface on a solid support according to claim 1, wherein the solid support is a piezoelectric crystal electrode or a glass plate or prism.

7(canceled).

8(previously presented). A method of detecting analyte antigens in an aqueous solution comprising activating, if necessary, the coated metal surface on a solid support according to claim 1 lacking bound antibodies by bringing antigen-specific antibodies into contact with the coated metal surface in an aqueous solution, allowing binding of the antibodies to the antigens of the coating, removing excess antibodies, bringing the aqueous solution possibly containing the analyte antigens that have higher affinity to the antibodies than the antigens of the coating into contact with the antibodies reversibly bound to the coating, allowing the antibodies to dissociate and react with the analyte antigens, and detecting the loss of mass on the coated metal surface by means of an analysis device.

9(original). A method according to claim 8, wherein the analysis device is selected from the group consisting of a Piezoelectric Quartz Crystal Microbalance device and a Surface Plasmon Resonance biosensor.

10(previously presented). The method according to claim 8, wherein the analysis device comprises a flow cell in which the coated metal surface on a solid support is placed.

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11(previously presented). The method according to claim 9, wherein the analysis device comprises a flow cell in which the coated metal surface on a solid support is placed.